

ASSIGNED

Serial No. 51035

APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER  
OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE  
STATE OF NEVADA HERETOFORE APPROPRIATED

Date of filing in State Engineer's Office JUN 17 1987

Returned to applicant for correction \_\_\_\_\_

Corrected application filed \_\_\_\_\_ Map filed SEP 01 1987 under 51029

The applicant Oxbow Geothermal Corporation

200 S. Virginia St., Suite 450 of Reno  
Street and No. or P.O. Box No. City or Town

Nevada 89501 hereby make S. application for permission to change the  
State and Zip Code No.

point of diversion and place of use  
Point of diversion, manner of use, and/or place of use

of water heretofore appropriated under Permit #41914  
(Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and

Identify right in Decree.)

1. The source of water is Dixie Valley Geothermal Reservoir (underground)  
Name of stream, lake, underground spring or other source.

2. The amount of water to be changed 3.25 cfs up to 235 ac/ft annual consumption  
Second feet, acre feet. One second foot equals 448.83 gallons per minute.

3. The water to be used for industrial (power)  
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.

4. The water heretofore permitted for industrial (power)  
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.

5. The water is to be diverted at the following point SW $\frac{1}{4}$  SW $\frac{1}{4}$  SECTION 33, T25N, R37E, M.D.M. OR  
Describe as being within a 40-acre subdivision of public survey and by course and  
AT A POINT FROM WHICH THE SW CORNER OF SAID SECTION BEARS S 44° 54' W 1400.07  
distance to a section corner. If on unsurveyed land, it should be stated.  
FEET.

6. The existing permitted point of diversion is located within NW $\frac{1}{4}$  NW $\frac{1}{4}$  SECTION 19, R24N, R37E, M.D.M.  
If point of diversion is not changed, do not answer.  
OR AT A POINT FROM WHICH THE NW CORNER OF SECTION 5, T24N, R37 E, M.D.M. BEARS  
N 13° 28' 53" E 17,079.6 FEET.

7. Proposed place of use NE $\frac{1}{4}$  of Section 7 T24N R37E MDM  
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated.

8. Existing place of use Section 32, T25N R37E MDB&M; Sections 4, 5, 6, 7, 8, 17, 18, 19, 20  
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or

21 T24N R37E, MDB&M; Sections 12, 13, 24 T24N R36E MDB&M  
manner of use of irrigation permit, describe acreage to be removed from irrigation.

9. Use will be from January 1 to December 31 of each year.  
Month and Day Month and Day

10. Use was permitted from January 1 to December 31 of each year.  
Month and Day Month and Day

11. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and  
specifications of your diversion or storage works.) geothermal well with piping to power  
State manner in which water is to be diverted, i.e. diversion structure, ditches,  
plant  
pipes and flumes, or drilled well, etc.

12. Estimated cost of works \$1.7 million

13. Estimated time required to construct works well completed (see Attached) 18 months for power  
plant

14. Estimated time required to complete the application of water to beneficial use 3 years

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

well will join with 5 others to generate 50MW of electric power. Plant will  
require 1875 cf/min. (31.25 cfs) and consume 6028 ac/ft annually.

By s/Lori L. Orser

200 S. Virginia St., Suite 450  
Reno, Nevada 89501

Compared jjk/bk jjk/bc

Protested \_\_\_\_\_

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion and place of use of the waters of an underground source as heretofore granted under Permit 41914 is issued subject to the terms and conditions imposed in said Permit 41914 and with the understanding that no other rights on the source will be affected by the change proposed herein.

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production well and the amount of fluid injected into the injection well to determine the total amount of fluid diverted and consumed for a beneficial use.

The production and injection well are to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the injection well and/or other analyses of the system used for returning the used geothermal fluids to the source must be submitted together with the Proof of Completion.

(CONTINUED ON PAGE 2)

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed 3.25 cubic feet per second, but not to exceed a consumptive use of 235 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before NOVEMBER 21, 1988

Proof of completion of work shall be filed before DECEMBER 21, 1988

Application of water to beneficial use shall be made on or before NOVEMBER 21, 1990

Proof of the application of water to beneficial use shall be filed on or before DECEMBER 21, 1990

Map in support of proof of beneficial use shall be filed on or before \_\_\_\_\_

Completion of work filed DEC 23 1988

Proof of beneficial use filed 5-26-89

Cultural map filed \_\_\_\_\_

Certificate No. 12913 Issued JUL 26 1991

IN TESTIMONY WHEREOF, I PETER G. MORROS,  
 State Engineer of Nevada, have hereunto set my hand and the seal of  
 my office, this 13th day of MAY

Peter G. Morros  
 State Engineer

## Permit Terms Continued

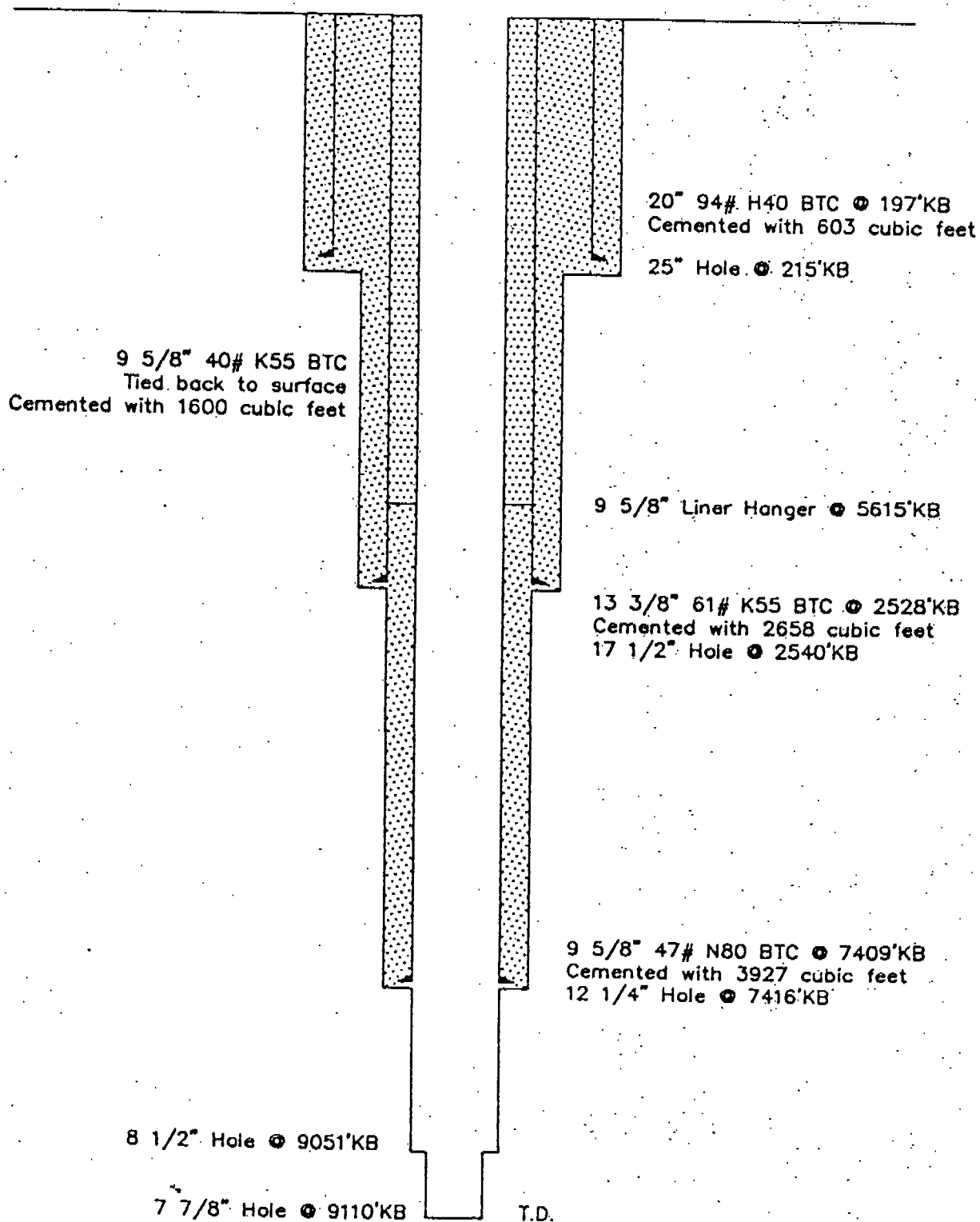
An annual report for this well must be filed under this permit describing the amount of geothermal fluid diverted and consumed to a beneficial use for the calendar year. This report must detail the amount of fluid produced and injected.

The total withdrawal of the geothermal fluid shall be limited to 2353 acre-feet per year but the total combined consumptive use of the geothermal fluid under Permits 41892, 41920, 41929, 43050, 43052, 46951, 47142, 47322, 47323, 48932, 48933, 48934, 48935, 49572, 49573, 49574, 49644, 49802, 49803, 51029, 51030, 51031, 51032, 51033, 51034, 51035 and 51036 shall not exceed 10,704 acre-feet annually. The State Engineer does not waive the right to make a determination of consumptive use at any time and impose additional conditions thereto. This permit is further issued subject to the provisions of NRS 533.372(1) and with the understanding that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.



## Well Completion Diagram Well 27-33

Location: NE-SW-SW Section 33-25N-37E  
Churchill County, Nevada  
Datum: 3469' KB, 23' Above Ground Level  
Drilled: 08/31/83



OXBOW

Figure 7.1.9

